

## **AMENDMENT(S) TO THE SPECIFICATION**

**Please add a paragraph beginning at page 1, line 3:**

## **CROSS REFERENCE TO RELATED APPLICATION**

The present application is a 35 U.S.C. §§ 371 national phase conversion of PCT/FR2004/000637, filed 16 March 2004, which claims priority of French Application No. 03/03490, filed 21 March 2003. The PCT International Application was published in the French language.

**Please replace the paragraph beginning at page 1, line 4, with the following rewritten paragraph:**

## **BACKGROUND OF THE INVENTION**

The present invention relates to a flexible tubular pipe of the type ~~of those~~ used for the production and transport of fluids in the offshore oil industry. More precisely, it relates to pipes designed to transport gas or multiphase fluids.

**Please replace the paragraph beginning at page 1, line 4, with the following rewritten paragraph:**

Pipes intended for transporting a fluid in the offshore oil industry have been described in many patents of the ~~Applicant~~ Assignee hereof, such as, for example, ~~the patent~~ EP 0 937 932. They comply with, among others, API (American Petroleum Institute) Recommended Practice 17B. The pipes are formed ~~from~~ by a combination of various layers, each intended to allow the flexible pipe to withstand the service and handling stresses, and also the stresses specifically related to their offshore use. In particular, these layers comprise polymeric sheaths and reinforcement layers formed by the winding of profiled wires, strips or composite wires, but they may also include the winding of various tapes between the various reinforcement layers. More particularly, they include at least one internal sealing sheath or pressure sheath designed to carry the transported fluid. ~~Said~~ The sealing sheath may be the innermost element of the pipe (~~the~~ and that pipe is ~~then~~ called a smooth-bore pipe or the sheath it may be placed around a carcass formed, for example from

the short pitch winding of an interlocked strip (~~the and that~~ pipe is then called a rough-bore pipe[1]). Reinforcement layers formed from the winding of metal or composite wires are generally placed around the pressure sheath and may comprise, for example:

- a pressure armor formed by the short-pitch winding of an interlocking profiled metal wire, said pressure armor being placed directly around the sealing sheath so as to take up the radial component of the internal pressure;
- optionally, a hoop formed by the short-pitch winding of a non-interlocking profiled wire placed on top of the pressure armor in order to contribute to the internal pressure resistance, the pressure armor, with or without said hoop, forming what is called the pressure vault of the pipe; and
- tensile armor plies formed by long-pitch windings of metal or composite profiled wires, said plies being intended to take up the axial component of the internal pressure and also the longitudinal stresses to which the pipe is subjected, such as for example the forces when laying said pipe.

**Please replace the paragraph beginning at page 4, line 5, with the following rewritten paragraph:**

Thus, there exists a real need for a low-cost structure of the smooth-bore type that can be used to transport gases or multiphase fluids. To try to satisfy this need, solutions have been proposed that consist in draining the gas closest to the internal pressure sheath. International Patent application WO 01/33130 describes a flexible pipe whose internal sheath has grooves in its external surface, said grooves being designed to drain away the gas between said sheath and the pressure vault. In the Applicant's Assignee's patent application FR 01/11135 (not yet published), the internal pressure sheath is formed in two layers (double sheath) and the gas is drained away between the two sheaths in longitudinal grooves provided for this purpose. However, these solutions are very complicated to implement, especially because of problems due to creep of the thermoplastics used to produce the sheaths.

**Please replace the paragraph beginning at page 4, line 31, with the following rewritten paragraph:**

In another patent (EP 0 937 932), the Applicant Assignee has disclosed a pipe with a structure that includes two tensile armor pairs and an intermediate sheath lying between the external armor pair and the internal armor pair, it being possible for such structure to be a smooth-bore structure. In such a structure the gas present in the internal annulus (the space lying between the internal sheath and the intermediate sheath) is drained away into the inner tensile armor pair, which has a lay angle of between 30 and 55°. However, this proposed solution does not make it possible to produce a low-cost smooth-bore pipe that can be used in production, especially because of the four tensile armor plies for the pipe, which increase its cost.

**Please insert the following section heading at page 5, line 21:**

## **SUMMARY OF THE INVENTION**

**Please insert the following section heading at page 6, line 33:**

## **BRIEF DESCRIPTION OF THE DRAWINGS**

**Please replace the paragraph beginning at page 7, line 17, with the following rewritten paragraph:**

## **DESCRIPTION OF PREFERRED EMBODIMENTS**

To make it easier to understand ~~figures~~ Figures 3 to 5, the winding that forms the draining layer is shown in one plane.